Micro Commercial Components
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SBG2030CT THRU SBG2045CT

20 Amp Schottky Barrier Rectifier 30 to 45 Volts

Features

- Meatl of Silicon Rectifier, Majority Conducton
- Guard ring for transient protection
- Low Forward Voltage Drop
- High Current Capability, High Efficiency
- Low Power Loss

Maximum Ratings

- Operating Junction Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C

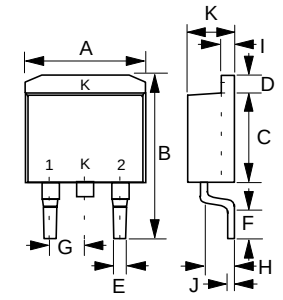
MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SBG2030CT	30V	21V	30V
SBG2035CT	35V	24.5V	35V
SBG2040CT	40V	28V	40V
SBG2045CT	45V	31.5V	45V

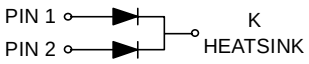
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	20 A	T_C = 105°C
Peak Forward Surge Current	I_{FSM}	225A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	.55V	I_{FM} = 10A; T_J = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1.0mA 50mA	T_J = 25°C T_J = 100°C
Typical Junction Capacitance	C_J	350pF	Measured at 1.0MHz, V_R=4.0V

*Pulse Test: Pulse Width 300µsec, Duty Cycle 2%

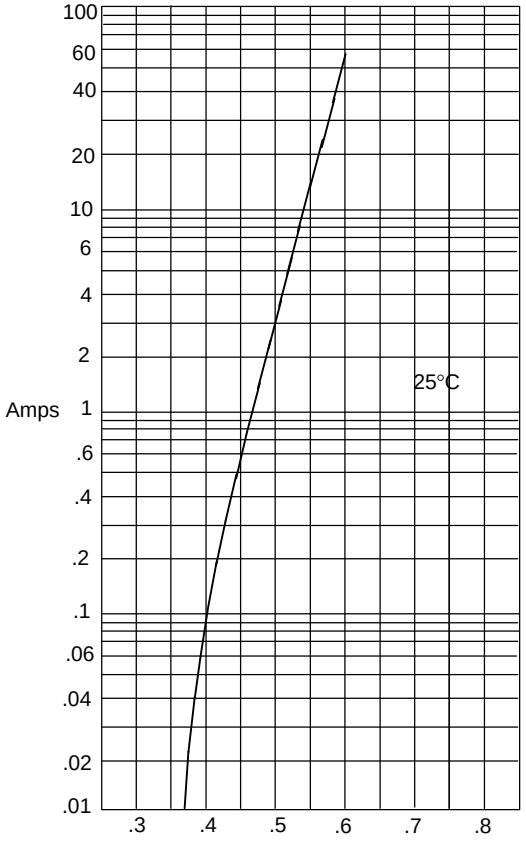
D²PAK





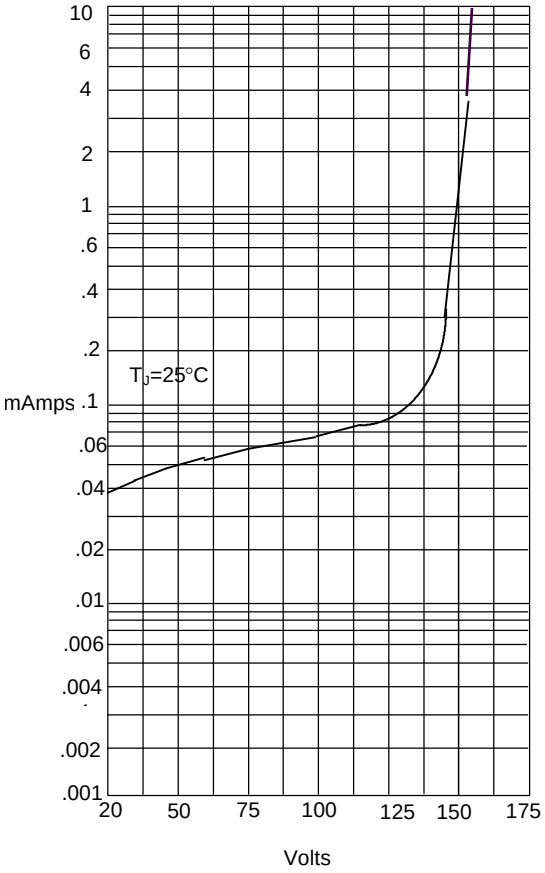
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.380	.421	9.65	10.69	
B	.575	.625	14.60	15.88	
C	.325	.364	8.25	9.25	
D	.045	.055	1.14	1.40	
E	.020	.045	0.51	1.14	
F	.090	.110	2.29	2.79	
G	.090	.110	2.29	2.79	
H	.080	.115	2.03	2.92	
I	.045	.055	1.14	1.40	
J	.012	.025	0.30	0.64	
K	.172	.190	4.37	4.83	

Figure 1
Typical Forward Characteristics



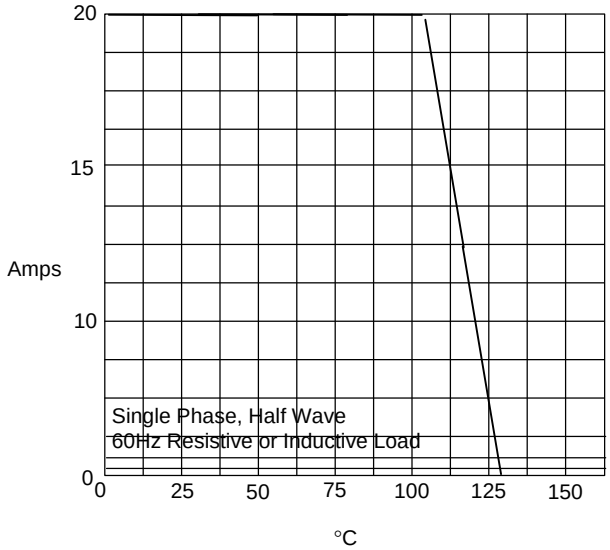
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



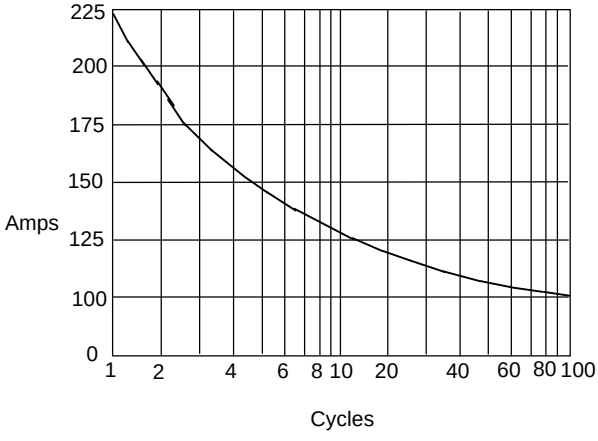
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Case Temperature -°C

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles